Serial No. 09/965,893 Amendment and Response to Office Action Mailed: 10 March 2006

Remarks / Arguments

In the Office Action, the Examiner rejected claims 1 – 35 as being unpatentable over Ip (U.S. Application No. 2003/0046339) or unpatentable over Ip in view of Smith (U.S. Patent No. 6,792,515). By this paper, the Applicant has amended claims 8 and 11, and cancelled claims 9 and 10. Claims: 1 – 8 and 11 – 35 are now pending. The amendments to the Claims do not add any new matter. In view of the forgoing amendments and the following remarks, the Applicant respectfully requests reconsideration and allowance of all pending claims.

Claim Rejections under 35 U.S.C. § 102

In the Office Action, the Examiner rejects claims 1-3, 7-9, 12-15, 17-18, 22-25, 27-28, and 32-34 under 35 U.S.C. § 102 as being unpatentable over Ip, 2003/0046339.

Claim 1

Applicant notes Ip fails to teach "wherein the chassis controllers transmit and receive a server rack name on the communications bus". Further Ip fails to teach "wherein the name of the rack is stored in the memory in each chassis controller". Instead, Ip teaches "[a] data collection unit associated with a rack ... that is operable to collect data from the server sensors and rack sensors of the devices associated with the data collection unit." Applicant notes that a data collection unit is a separate entity from the chassis controller (server) as noted by the phrases: "a data collection unit is preferably associated with each rack" (IP, paragraph 0024), "Data collection unit may also received status information from the servers ... a serial communication

Serial No. 09/965,893 Amendment and Response to Office Action Mailed: 10 March 2006

circuit may send serial signals from the server sensor circuits within the server to the data collection unit" (IP, paragraph 0026)

Claims 2, 3, and 7

Claims 2, 3, and 7 are dependent on claim 1 and should be allowed based on the same remarks above regarding claim 1.

Claims 8 and 9

Applicant has amended claim 8 to include limitations of dependant claims 9 and 10 thus including limitations not taught by Ip.

Claims 12 - 15, 17 - 18, 22 - 25, 27 - 28, and 32 - 34

Examiner rejected claims 12-15, 17-18, 22-25, 27-28, and 32-34 remarking they do not add or define any additional limitations over claims 1-3, and 7-9. Applicant disagrees and points to some specific limitations below.

Applicant further notes that a general difference between Ip and current application results from Ip's teachings to "collect data that is common to all of the servers on the rack" (Ip, Paragraph 0021) and store it in a single location, i.e. "[a] data collection unit ... associated with a rack or a group of servers" (Ip, Paragraph 0008). This differs from Applicant's approach of eliminating the extra cost and maintenance of a "data collection unit" while still making common information accessible from multiple locations by storing said information redundantly, i.e. "the name of the rack is stored in the memory in each chassis controller" [emphasis added] (Applicant, Claim 1), and the resulting problem "of propagating a rack name within a server

Serial No. 09/965,893 Amendment and Response to Office Action Mailed: 10 March 2006

rack" (Applicant, Claim 12) when, for various reasons, said rack name conflicts between the distributed storage locations.

Claim 12

Applicant notes claim 12 includes the limitation "receiving a request to set the rack name at one of a plurality of chassis controllers housed within the server rack", Ip teaches "[a] data collection unit is associated with a rack or a group of servers" (Ip, Paragraph 0008) and "... users may access the status and location information from the data collection units" (Ip, Paragraph 0009).

Claim 13

Applicant notes claim 13 includes the limitation "setting the rack name within the receiving chassis controller", Ip teaches "[a] data collection unit is associated with a rack or a group of servers" (Ip, Paragraph 0008) and "... users may access the status and location information from the data collection units" (Ip, Paragraph 0009).

Claim 14

Applicant notes claim 14, in addition to the limitation included from claims 13 and 12, includes the limitation "if the transmitting chassis controller is not authorized to issue the request, issuing a security alert", Ip fails to teach any form of security or to limit information change in any way. In particular, Ip makes attempts to render information as accessible as possible by including 'network protocols suitable for communication ... include, but not limited to, ... HTTP, SMTP, TCP/IP, TCP, IP, ARP, IRC, UDP, IGMP, or ICMP' (Ip, Paragraph 0029)

Mailed: 10 March 2006

most of which are known in the art to be in themselves inherently insecure. Further Ip teaches "a typical web browser software application may provide the necessary interface to query and obtain data from the web server circuit ... Accordingly, no specialized communication program or protocol is required to display or print information received from the web server circuit." (Ip, Paragraph 0030).

Claim 15

Applicant points to limitation in claim 15 "forwarding the new rack name along the internal bus to another of the plurality of chassis controllers". As Ip teaches central storage of common data, Ip fails to teach notifying multiple chassis controllers of changes in the rack name.

Claims 17 - 18

Applicant notes claim 12 includes the limitation "issuing a request for a rack name from a first to a second of a plurality of chassis controllers housed within the server rack". Since it has been shown, Ip teaches storage of common data in a central location, it can be argued that Ip fails to teach methods of prorogating information across distributed locations, and further fails to teach methods of resolving conflicts between common information stored in said multiple locations.

Claims 22 - 25, 27 - 28

Applicant refers to arguments made above and notes, Ip teaches storage of common data in a central location, it can be argued that Ip fails to teach methods of prorogating information across distributed locations, and further fails to teach methods of resolving conflicts between

Mailed: 10 March 2006

common information stored in said multiple locations. Further, since it has been shown Ip teaches the sharing of this information through open protocols, it can be argued that Ip fails to teach checking "if the transmitting peer controller is authorized to issue the request" or "issuing a security alert".

Claims 32 - 34

Applicant refers to arguments made above and notes, Ip teaches storage of common data in a central location, Ip fails to teach the limitations "name of the rack is stored in the memory in each peer controller." Further, Ip teaches special equipment incorporated in the rack and servers to be used for identifying the components; "one [or] more rack sensors that may collect rackwide sensor data." (Ip, Paragraph 0021), and "each server also preferably contains one or more server sensors" (Ip, Paragraph 0023), and "a dip switch may be associated with each rack such that each rack may be identified by a binary number or code defined by that dip switch" (Ip, Paragraph 0024), and finally "An radio frequency identification (RFID) tag may be associated with rack ... Rack RFID tags may contain data regarding the unique identification of rack ... RFID tags may be associated with servers ..." (Ip, Paragraph 0025). Ip fails to teach methods of setting this information, or more specifically reconfiguring (changing) it. And further, while DIP switches must be physically changed, RFID tags require specific electronics to set, and are often designed to be set by the manufacturer and never changed again. This is in direct contrast to the spirit of this application which specifically allows users to set and change information.

Mailed: 10 March 2006

Claim Rejections under 35 U.S.C. § 103

In the Office Action, the Examiner rejects claims 4-6, 10-11, 16, 19-21, 26, 29-31, and 35 under 35 U.S.C. § 103 as being unpatentable over Ip in view of Smith, 6,792,515.

Claims 4-6

Examiner states "it would have been obvious ... to incorporate the use of Smith's unique server addressing with ip's system as ip teaches giving a server or rack a unique MAC address or IP address ... it would have been desirable to Ip's system to have another unique naming scheme as similarly taught by Smith." Applicant suspects that examiner may have miss construed the purpose of Applicant's invention which is not to uniquely name each rack, or each chassis controller within said rack, but to share common information, namely the rack name, across the multiple chassis controllers installed within said rack ensuring information set by a user in one chassis controller is propagated to other chassis controllers, and further provide a method for newly integrated chassis controllers to query for common information from it's neighbor systems. In instances where the correct information could not be determined due to conflicting settings between chassis controllers, a message and flag is used to identify, to a querying user, current information in a chassis controller as being suspect.

Claims 10 - 11

Examiner states "Smith teaches avoiding duplicate geographical addressing for server blades." Applicant argues that Smith's teachings, "the identification information may be read from the geographic address (GA) pins on the system's J2 connector, where each blade's GA

Mailed: 10 March 2006

pins are hardwired to a unique combination of 0's (ground) and 1's Vcc at the connector" is a hardware solution of device identification which is completely incompatible with Applicant's invention "wherein the name of the rack in which the chassis is disposed is stored in flash memory". Further, Smith's teachings of "hardwired ... unique combinations" are completely at odds with Applicant's invention of "Method for Interrogating and proliferating a rack name in a rack of servers" as Smith's identifier would not be changeable. Further as Smith's solution is hardwired, it would not be possible to carry out the steps of Applicant's invention which state "if the controller receives a conflict message from the internal bus, the existing name in flash memory is invalidated".

Claims 16, 19 - 21, 26, 29 - 31, and 35

Examiner rejected claims 16, 19-21, 26, 29-31, and 35 remarking they do not add or define any additional limitations over claims 4-6, and 10-11. Applicant disagrees and points to some specific limitations below.

Claim 16

Applicant notes claim 16 includes the limitation "clearing any naming conflict flag after setting the new rack name.", As Smith does not teach the use of flags to identify conflicts, and Ip does not allow conflicts with "[a] data collection unit is associated with a rack or a group of servers" (Ip, Paragraph 0008) and "... users may access the status and location information from the data collection units" (Ip, Paragraph 0009), Applicant argues that this limitation is not anticipated by Examiner's citings.

Mailed: 10 March 2006

Claim 17 - 19

With respect to claim 17 and its dependant claims 19 - 21, since it has been shown, Ip teaches storage of common data in a central location, and the hardwired solution taught by Smith does not allow changes in system identifiers, it can be argued that both fail to teach methods of prorogating information across distributed locations, and further fails to teach methods of resolving conflicts between common information stored in said multiple locations.

Claim 26, 29 - 31, and 35

It has been shown, Ip teaches storage of common data in a central location, and the hardwired solution taught by Smith does not allow changes in system identifiers. Applicant argues that since neither system could have conflicting rack identifiers, both fail to teach the methods of identifying, alerting, and rectifying the situations as claimed by the Applicant.

Mailed: 10 March 2006

Conclusion

The Applicant respectfully submits that all pending claims are in condition for allowance. However, if the Examiner wishes to resolve any other issues by way of a telephone conference, the Examiner is kindly invited to contact the undersigned at the telephone number indicated below.

Respectfully submitted.

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